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Oct 25 2002

TECH CENTER 1600/2900



1600

RAW SEQUENCE LISTING

DATE: 10/16/2002

PATENT APPLICATION: US/09/721,414C

TIME: 15:23:35

Input Set : A:\EP.txt

Output Set: N:\CRF4\10162002\I721414C.raw

3 <110> APPLICANT: Suga, Hiroaki
5 <120> TITLE OF INVENTION: Catalytic RNA Molecules with Aminoacylation Activity
7 <130> FILE REFERENCE: 11520.0222
9 <140> CURRENT APPLICATION NUMBER: US 09/721,414C
10 <141> CURRENT FILING DATE: 2000-11-22
12 <150> PRIOR APPLICATION NUMBER: US 60/167,331
13 <151> PRIOR FILING DATE: 1999-11-24
14 <150> PRIOR APPLICATION NUMBER: US 60/214,382
15 <151> PRIOR FILING DATE: 2000-06-28
17 <160> NUMBER OF SEQ ID NOS: 22
19 <210> SEQ ID NO: 1

20 <211> LENGTH: 110
21 <212> TYPE: DNA
22 <213> ORGANISM: artificial sequence
24 <220> FEATURE:

W--> 25 <221> NAME/KEY: n

26 <222> LOCATION: 21-90

27 <223> OTHER INFORMATION: synthetic oligonucleotide containing random pool of 70 nucleotides; n

28 represents a,t,g or c.

30 <400> SEQUENCE: 1

W--> 31 ggatcgctcag tgcatgaga nnnnnnnnnn nnnnnnnnnn 40

W--> 32 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 80

W--> 33 nnnnnnnnnn ggtggatatcc ccaaggggta 110

35 <210> SEQ ID NO: 2

36 <211> LENGTH: 76

37 <212> TYPE: DNA

38 <213> ORGANISM: artificial sequence

40 <220> FEATURE:

41 <223> OTHER INFORMATION: completely synthesized primer complementary to the otrNAGln

43 <400> SEQUENCE: 2

44 tggctgcggt acgaggattc gaacctcgga atgccggatt 40

45 tagaatccg gtcccttacc ccttggggat accacc 76

48 <210> SEQ ID NO: 3

49 <211> LENGTH: 52

50 <212> TYPE: DNA

51 <213> ORGANISM: artificial sequence

53 <220> FEATURE:

54 <223> OTHER INFORMATION: 5' primer containing T7 promoter sequence

56 <400> SEQUENCE: 3

57 ggtaacacgc atatgtaata cgactcacta taggatcgtc 40

58 agtgcattga ga 52

60 <210> SEQ ID NO: 4

61 <211> LENGTH: 20

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62 <212> TYPE: DNA
 63 <213> ORGANISM: artificial sequence
 65 <220> FEATURE:
 66 <223> OTHER INFORMATION: 3'completely synthesized primer
 68 <400> SEQUENCE: 4

69 tggctgctggt acgaggattc 20

71 <210> SEQ ID NO: 5

72 <211> LENGTH: 146

73 <212> TYPE: RNA

74 <213> ORGANISM: artificial sequence

76 <220> FEATURE:

77 <223> OTHER INFORMATION: pre-12 catalytic RNA

79 <400> SEQUENCE: 5

80 ggaucgucag ugcauugaga uuuccgcagc ccuucucacu 40

81 aacggugggu cauggguauu ggcguuaggu gcgggaugcu 80

82 acgcuggugg uauccccaag gguacgggac cggacauucg 120

83 agauucgaau ccucguaccg cagcca 146

86 <210> SEQ ID NO: 6

87 <211> LENGTH: 151

88 <212> TYPE: RNA

89 <213> ORGANISM: artificial sequence

91 <220> FEATURE:

W--> 92 <221> NAME/KEY: n

93 <222> LOCATION: 12

94 <223> OTHER INFORMATION: pre-38 catalytic RNA; n represents a,u,g or c

96 <400> SEQUENCE: 6

W--> 97 ggaucgucag uncauugaga uuuccgcagc ccuucucacu 40

98 aacggugggu ucauggguau uggcguuagg ugcgggaugc 80

99 uacuacgcug gugguauccc caaggguaacg ggaccggau 120

100 auucgagauu cgaauccucg uaccgcagcc a 151

103 <210> SEQ ID NO: 7

104 <211> LENGTH: 150

105 <212> TYPE: RNA

106 <213> ORGANISM: artificial sequence

109 <220> FEATURE:

110 <223> OTHER INFORMATION: pre-29 catalytic RNA

112 <400> SEQUENCE: 7

113 ggaucgucag ugcauugaga uuuccgcagg ccuucucac 40

114 uaacgguggg ucauggguau uggcguuagg ugcgggaugc 80

115 uacuacgcug gugguauccc caaggguaacg ggaccggaca 120

116 uucgagauuc gaauccucg accgcagcca 150

118 <210> SEQ ID NO: 8

119 <211> LENGTH: 150

120 <212> TYPE: RNA

121 <213> ORGANISM: artificial sequence

123 <220> FEATURE:

124 <223> OTHER INFORMATION: pre-36 catalytic RNA

126 <400> SEQUENCE: 8

127 ggaucgucag ugcauugaga uuuccgcagc ccuucucacu 40

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128 aacggugggu cauggguauu ggcguuaggu gcgggauucu      80
129 acuacgcugg ugguaucucc aagggguacgg gaccggauca      120
130 uucgagauuc gaaucucgu accgcagcca      150
132 <210> SEQ ID NO: 9
133 <211> LENGTH: 150
134 <212> TYPE: RNA
135 <213> ORGANISM: artificial sequence
137 <220> FEATURE:
138 <223> OTHER INFORMATION: pre-24 catalytic RNA
140 <400> SEQUENCE: 9
141 ggaucgucag ugcauugaga uuuccgcagg ccuucucac      40
142 uaacgguggg ucauggguau uggcguuagg ugcgggaugc      80
143 uacuacgcug gugguaucucc caagggguacg ggaccggaca      120
144 uucgagauuc gaaucucgu accgcagcca      150
146 <210> SEQ ID NO: 10
147 <211> LENGTH: 149
148 <212> TYPE: RNA
149 <213> ORGANISM: artificial Sequence
151 <220> FEATURE:
152 <223> OTHER INFORMATION: pre-25 catalytic RNA
154 <400> SEQUENCE: 10
155 ggaucgucag ugcauugaga uuuccgcagc ccuucucacu      40
156 aacggugggu cauggguauu ggcguuaggu gcgggauacu      80
157 acuacgcugg ugguaucucc aagggguacgg gaccggacau      120
158 ucgagauucg aaucucgua ccgcagcca      149
161 <210> SEQ ID NO: 11
162 <211> LENGTH: 149
163 <212> TYPE: RNA
164 <213> ORGANISM: artificial Sequence
166 <220> FEATURE:
167 <223> OTHER INFORMATION: pre-22 catalytic RNA
169 <400> SEQUENCE: 11
170 ggaucgucag ugcauugaga uuuccgcagc ccuucucacu      40
171 aacggugggu cauggguuuu ggcguuaggu gcgggauucu      80
172 acuacgcugg ugguaucucc aagggguacgg gaccggacau      120
173 ucgagauucg aaucucgua ccgcagcca      149
176 <210> SEQ ID NO: 12
177 <211> LENGTH: 149
178 <212> TYPE: RNA
179 <213> ORGANISM: artificial Sequence
181 <220> FEATURE:
W--> 182 <221> NAME/KEY: n
183 <222> LOCATION: 112
184 <223> OTHER INFORMATION: pre-5 catalytic RNA; n represents a,u,g or c
186 <400> SEQUENCE: 12
187 ggaucgucag ugcauugaga uuuccgcagc ccuucucacu      40
188 aacggugggu cauggguauu ggcguuaggu gcgggauucu      80
W--> 189 acuacgcugg ugguaucucc aagggguacgg gnccggacau      120
190 ucgagauucg aaucucgua ccgcagcca      149

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193 <210> SEQ ID NO: 13
194 <211> LENGTH: 149
195 <212> TYPE: RNA
196 <213> ORGANISM: artificial Sequence
198 <220> FEATURE:
199 <223> OTHER INFORMATION: pre-19 catalytic RNA
201 <400> SEQUENCE: 13
202 ggaucgucag ugcauugaga uuuccgcagc ccuucucacu      40
203 aacgguaggu cauggguaau ggcguuaggu gcgggaugcu      80
204 acuacgcugg ugguaucccc aaggguacgg gaccggacau     120
205 ucgagauucg aauccucgua ccgcagcca                  149
208 <210> SEQ ID NO: 14
209 <211> LENGTH: 150
210 <212> TYPE: RNA
211 <213> ORGANISM: artificial Sequence
213 <220> FEATURE:
214 <223> OTHER INFORMATION: pre-8 catalytic RNA
216 <400> SEQUENCE: 14
217 ggaucgucag ugcauugaga uuuccgcagc ccuucucacu      40
218 aacggugggg ucauggguaau uggcguuagg ugcgggaugc      80
219 uacuacgcug gugguaucuu caaggguacg ggaccggaca     120
220 uucuagauuc gaauccucgu accgcagcca                  150
223 <210> SEQ ID NO: 15
224 <211> LENGTH: 148
225 <212> TYPE: RNA
226 <213> ORGANISM: artificial Sequence
228 <220> FEATURE:
229 <223> OTHER INFORMATION: pre-23 catalytic RNA
231 <400> SEQUENCE: 15
232 ggaucgucag ugcauugaga uuuccgcagc ccuucucacu      40
233 aacggugggg cauggguaau ggcguuaggu gcgggaugcu      80
234 acuacgcugg ugguauccca aggguacggg accggacauu     120
235 cgagauucga auccucguac cgcagcca                  148
238 <210> SEQ ID NO: 16
239 <211> LENGTH: 75
240 <212> TYPE: RNA
241 <213> ORGANISM: Escherichia coli
243 <220> FEATURE:
244 <223> OTHER INFORMATION: otrNA
246 <400> SEQUENCE: 16
247 ggugguaucc ccaaggggua agggaccgga uucuaaaucc      40
248 ggcauuccga gguucgaau cugcuaccgc agcca            75
250 <210> SEQ ID NO: 17
251 <211> LENGTH: 160
252 <212> TYPE: RNA
253 <213> ORGANISM: artificial sequence
255 <220> FEATURE:
256 <223> OTHER INFORMATION: H2 Leu catalytic RNA
258 <400> SEQUENCE: 17

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RAW SEQUENCE LISTING

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259 ggau cgucag ugcauugaga ugcccaaagc ccuucucacu      40
260 uccggugggg caugcguuau ugcguuaggu gaggaau gcu      80
261 agau gcgggg ugguauc caa gggguaagg accggau ucu     120
262 aaau cggc au uccgaggu uc gaau ccu cg accgcagcca     160
264 <210> SEQ ID NO: 18
265 <211> LENGTH: 156
266 <212> TYPE: RNA
267 <213> ORGANISM: artificial sequence
269 <220> FEATURE:
270 <223> OTHER INFORMATION: D1-Leu catalytic RNA
272 <400> SEQUENCE: 18
273 ggau cgucag ugcauugaga uagugucacu aggcgggggg      40
274 ugau agcgca uuugaggu ugguuuggg gguu augcgu      80
275 gagu ucuugg gugguauc ca aggguaagg gaucuaaauc     120
276 cgau uuccg agguucga au ccucguaccg cagcca         156
279 <210> SEQ ID NO: 19
280 <211> LENGTH: 35
281 <212> TYPE: RNA
282 <213> ORGANISM: artificial sequence
284 <220> FEATURE:
285 <223> OTHER INFORMATION: RNA forming a minihelix
287 <400> SEQUENCE: 19
288 ggugguacga gguucgaauc cucguaccgc agcca          35
290 <210> SEQ ID NO: 20
291 <211> LENGTH: 73
292 <212> TYPE: RNA
293 <213> ORGANISM: artificial sequence
295 <220> FEATURE:
296 <223> OTHER INFORMATION: V1 variant of otrNA
298 <400> SEQUENCE: 20
299 ggugguaucc ccaagggua cgggaccgga ucuaaauccg      40
300 gcau ucgaga uucgaauc cu cguaccgcag cca          73
302 <210> SEQ ID NO: 21
303 <211> LENGTH: 75
304 <212> TYPE: RNA
305 <213> ORGANISM: artificial sequence
307 <220> FEATURE:
308 <223> OTHER INFORMATION: V2 variant of otrNA
310 <400> SEQUENCE: 21
311 ggugguaucc ccaagggua cgggaccgga ucuaaaucc      40
312 ggca uuccga gauucgaa uc cucguaccgc agcca         75
315 <210> SEQ ID NO: 22
316 <211> LENGTH: 73
317 <212> TYPE: RNA
318 <213> ORGANISM: artificial sequence
320 <220> FEATURE:
321 <223> OTHER INFORMATION: V3 variant of otrNA
323 <400> SEQUENCE: 22
325 ggugguaucc ccaaggguaa gggaccgga ucuaaauccg      40

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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 10/16/2002
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40
Seq#:1; N Pos. 41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60
Seq#:1; N Pos. 61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80
Seq#:1; N Pos. 81,82,83,84,85,86,87,88,89,90/
Seq#:6; N Pos. 12/
Seq#:12; N Pos. 112